

Application No. 10/008,960
Docket No. 3634-25

The listing of claims will replace all prior versions, and listings, of claims in this application.

Claim 1. (currently amended) An antibody to a senescent cell-derived inhibitor, SDI-1, which antibody specifically binds to an SDI-1 fusion protein, which protein comprises (i) an SDI-1 protein comprising the amino acid sequence [[shown as]] depicted in SEQ ID NO: 2 or a fragment thereof and (ii) a hinge region of at least the amino acids depicted in SEQ ID NO:9, which fusion protein is capable of inhibiting DNA synthesis in a recipient cell.

Claim 2. (originally presented) An antibody to a senescent cell-derived inhibitor, SDI-1, which antibody specifically binds to an SDI-1 fusion protein having the coding sequence of the cDNA insert of the plasmid contained in ATCC Deposit 69597.

Claim 3. (currently amended) An antibody to a senescent cell-derived inhibitor, SDI-1, which antibody specifically binds to an SDI-1 protein or an SDI-1 fusion protein comprising the amino acid sequence depicted in SEQ ID NO: 2.

Claim 4. (currently amended) An antibody to a senescent cell-derived inhibitor, SDI-1, which antibody specifically binds to [[the]] an SDI-1 protein encoded by SEQ ID NO: 1.

Claim 5. (originally presented) An antibody to a senescent cell-derived inhibitor, SDI-1, which antibody specifically binds to an SDI-1 protein having the coding sequence of the cDNA insert of the plasmid contained in ATCC Deposit 69081.

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Claim 6. (currently amended) A monoclonal antibody to a senescent cell-derived inhibitor, SDI-1, which antibody specifically binds to a an SDI-1 protein or a an SDI-1 fusion protein comprising at least the amino acid sequence ~~[[of]] depicted in~~ SEQ ID NO: 2

Claim 7. (currently amended) A monoclonal antibody to a senescent cell-derived inhibitor, SDI-1, which antibody specifically binds to:

- a) a protein ~~[[having]]~~ comprising the coding sequence of the cDNA insert of the plasmid contained in ATCC Deposit 69081;
- b) a fusion protein ~~[[having]]~~ comprising at least the coding sequence of the cDNA insert of the plasmid contained in ATCC Deposit 69081;
- c) a fusion protein ~~encoded by a sequence consisting of the coding sequence~~ the amino acid sequence depicted in SEQ ID No: 2; or
- d) a fusion protein ~~encoded by a sequence consisting of the coding sequence~~ consisting of the cDNA insert of the plasmid contained in ATCC Deposit 69597.

Claim 8. (currently amended) An antibody to a senescent cell-derived inhibitor, SDI-1, which antibody specifically binds to an SDI-1 fragment comprising in the fragment at least amino acids 1 to 71, 1 to 82, 1 to 123, 16 to 52, 42 to 47, 42 to 58, 42 to 71, 48 to 65, 49 to 53, 52 to 71, 53 to 58, 58 to 61, or 66 to 71 as depicted in SEQ ID NO: 2.

Claim 9. (currently amended) The SDI-1 antibody of Claim ~~[[29]]~~ 8, wherein the SDI-1 fragment comprises in the fragment amino acids 42 to 47, 42 to 58, 52 to 71, or 53 to 58.

Claim 10. (currently amended) A continuous cell line prepared by fusing a tumor cell with an antibody-producing cell derived from a mouse immunized with a protein which is a senescent cell-derived

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inhibitor, SDI-1, comprising the amino acid sequence [[shown as]] depicted in SEQ ID NO: 2, or a fragment thereof.

Claim 11. (currently amended) A continuous cell line which produces a monoclonal antibody specific for a protein which is a senescent cell derived inhibitor, SDI-1, comprising the amino acid sequence [[shown as]] depicted in SEQ ID NO: 2, or a fragment thereof, wherein the continuous cell line is prepared by fusing a myeloma or plasmacytoma cell with a splenic leukocyte or splenocyte derived from a mouse immunized with an SDI-1 protein or fragment thereof.

Claim 12. (currently amended) The cell line of Claim [[32,]] 11, wherein the cell line is prepared by fusing the myeloma cell with the splenic leukocyte.

Claim 13. (currently amended) The cell line of Claim [[32,]] 11, wherein the cell line is prepared by fusing the myeloma cell with the splenocyte.

Claim 14. (currently amended) The cell line of Claim [[32,]] 11, wherein the cell line is prepared by fusing the plasmacytoma cell with the splenic leukocyte.

Claim 15. (currently amended) The continuous cell line of Claim [[32,]] 11, wherein the hybridoma cell line is prepared by fusing the plasmacytoma cell with the splenocyte.

Claim 16. (previously amended) A composition which comprises the SDI-1 antibody of Claim 1, 2, 3, 4, 5, 8 or 9 in a pharmaceutically acceptable carrier.

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Claim 17. (previously amended) A composition which comprises the SDI-1 monoclonal antibody of Claim 6 or 7 in a pharmaceutically acceptable carrier.

Claim 18. (currently amended) A process for detecting the presence of a protein which is a senescent cell-derived inhibitor, SDI-1 protein[[,]] comprising the amino acid sequence [[shown as]] depicted in SEQ ID NO: 2, or a fragment thereof, which process comprises the steps of:

(a) contacting a sample with a soluble antibody to the SDI-1 protein or fragment thereof; and

(b) detecting the presence of the SDI-1 protein, or fragment thereof, bound to the antibody.